

FIG. 1

FIG.2

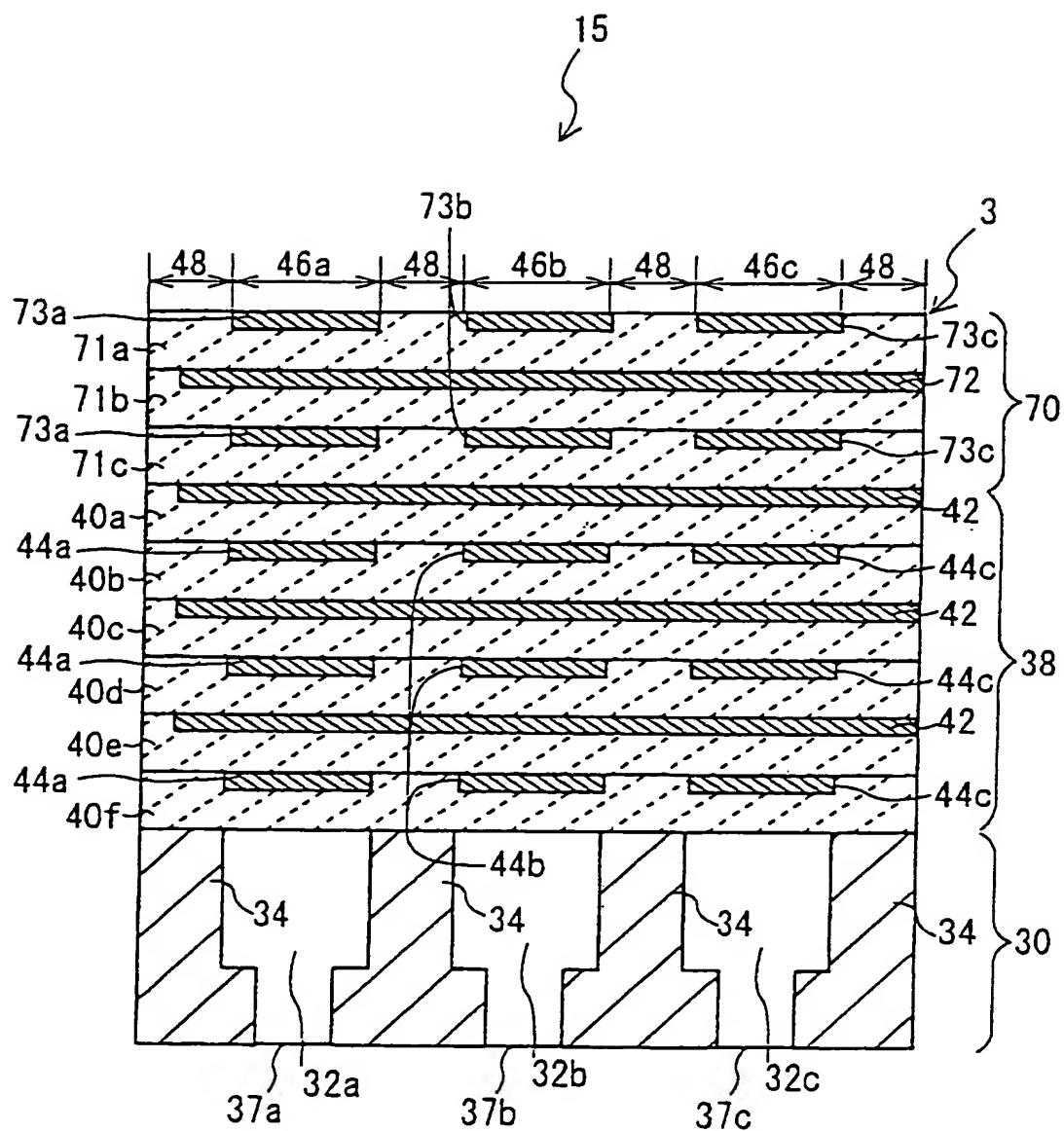


FIG.3

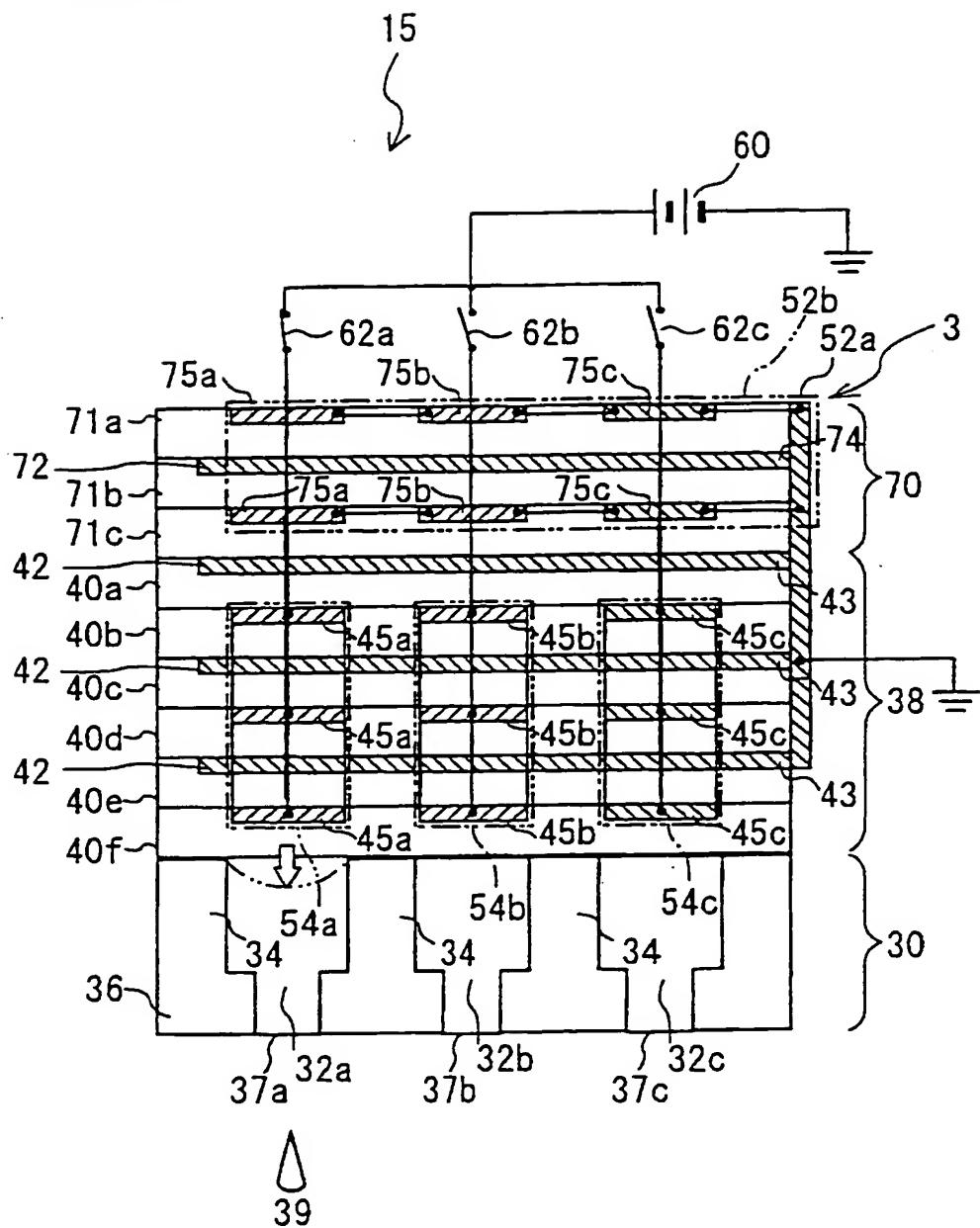
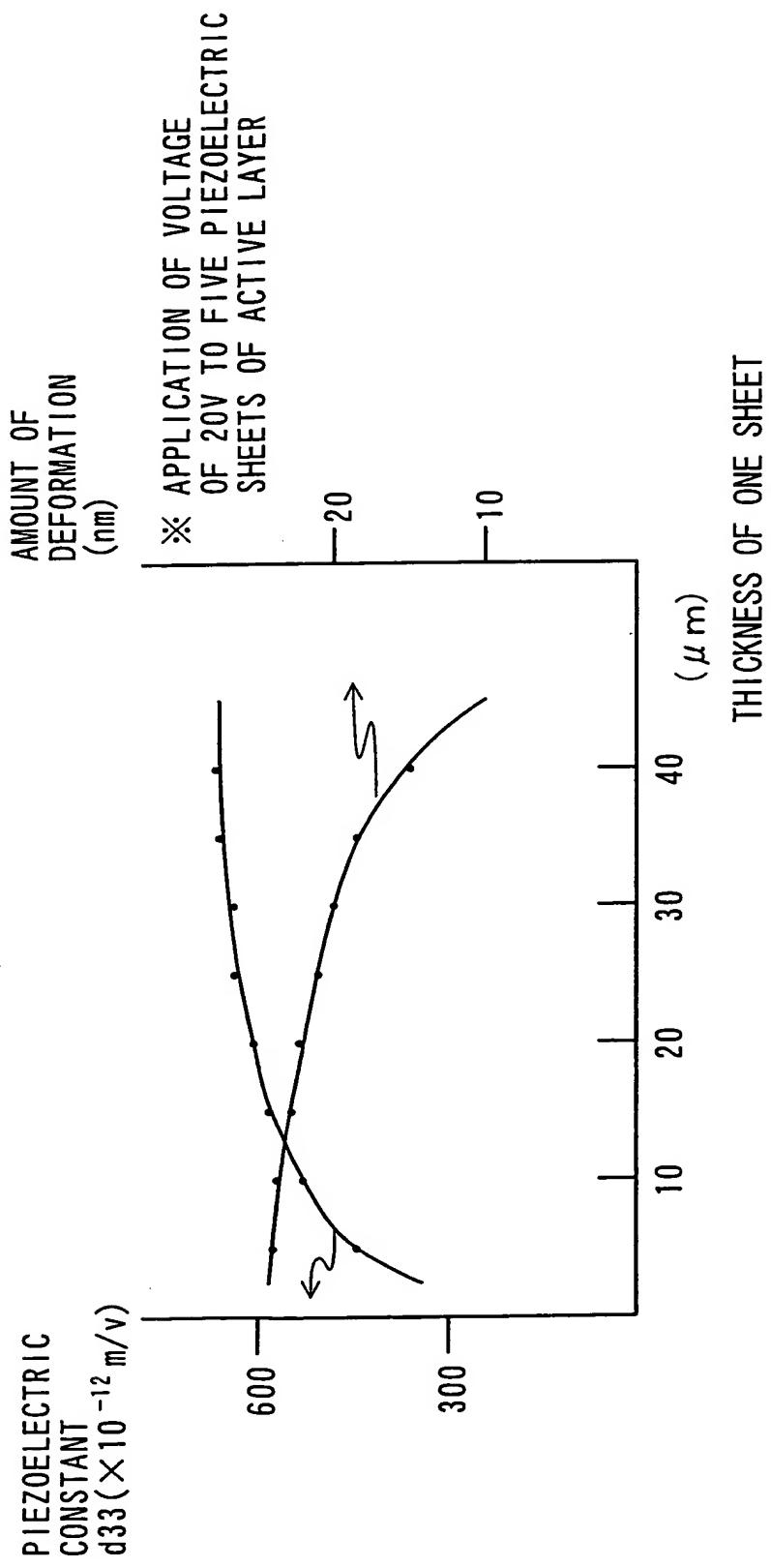


FIG.4



THICKNESS OF ONE PIEZOELECTRIC SHEET AND CHARACTERISTICS

FIG.5

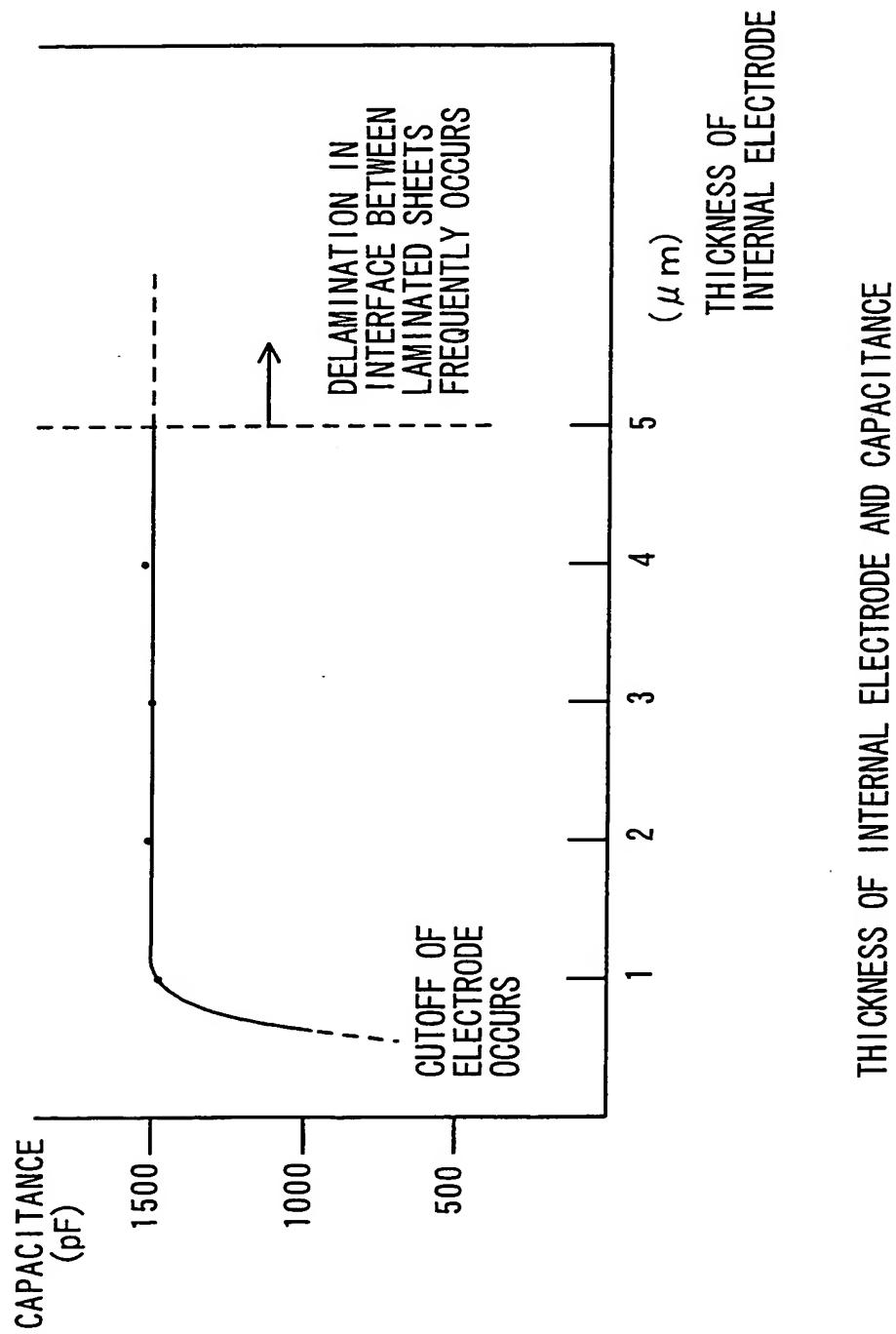


FIG.6

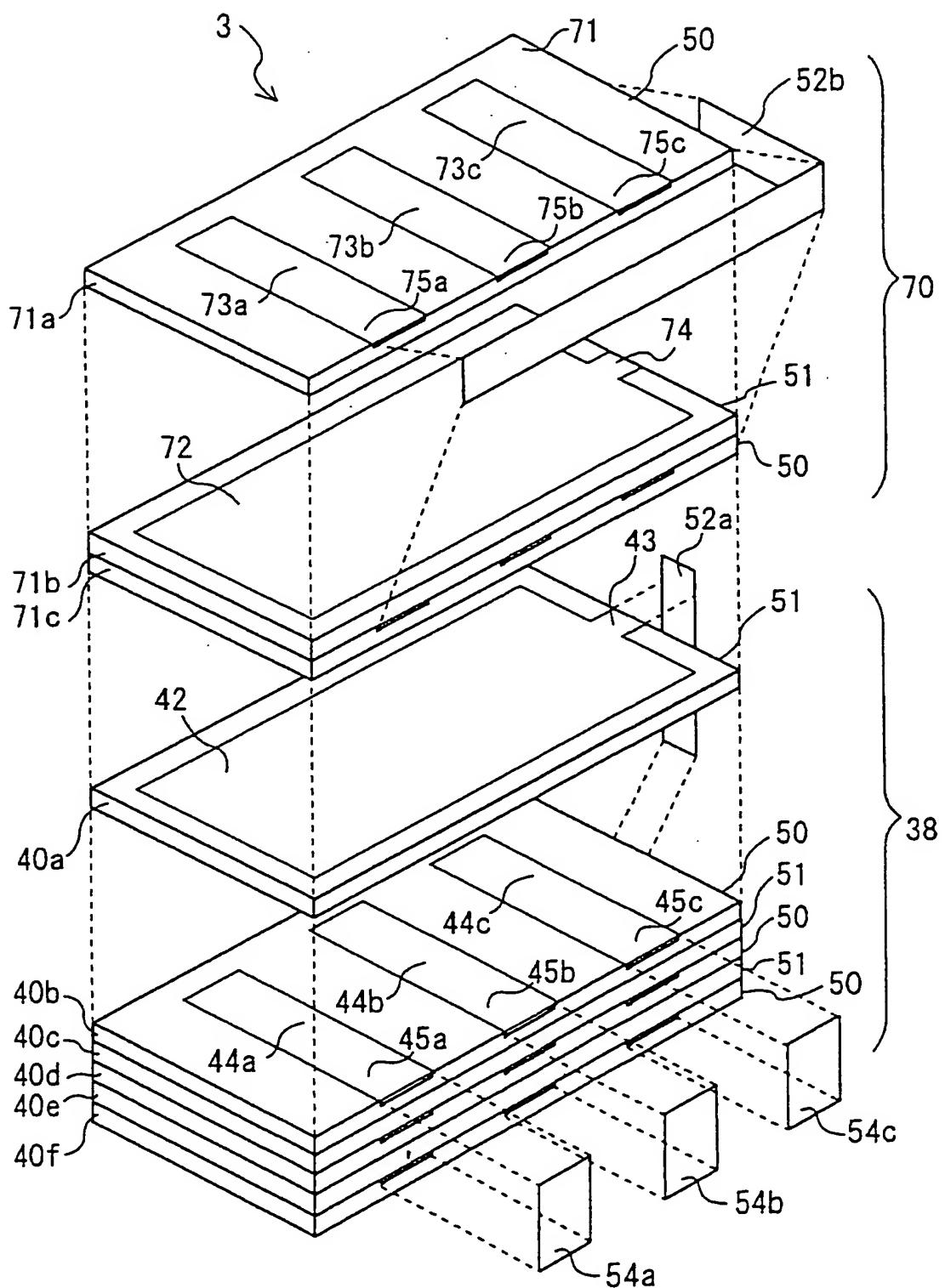


FIG. 7

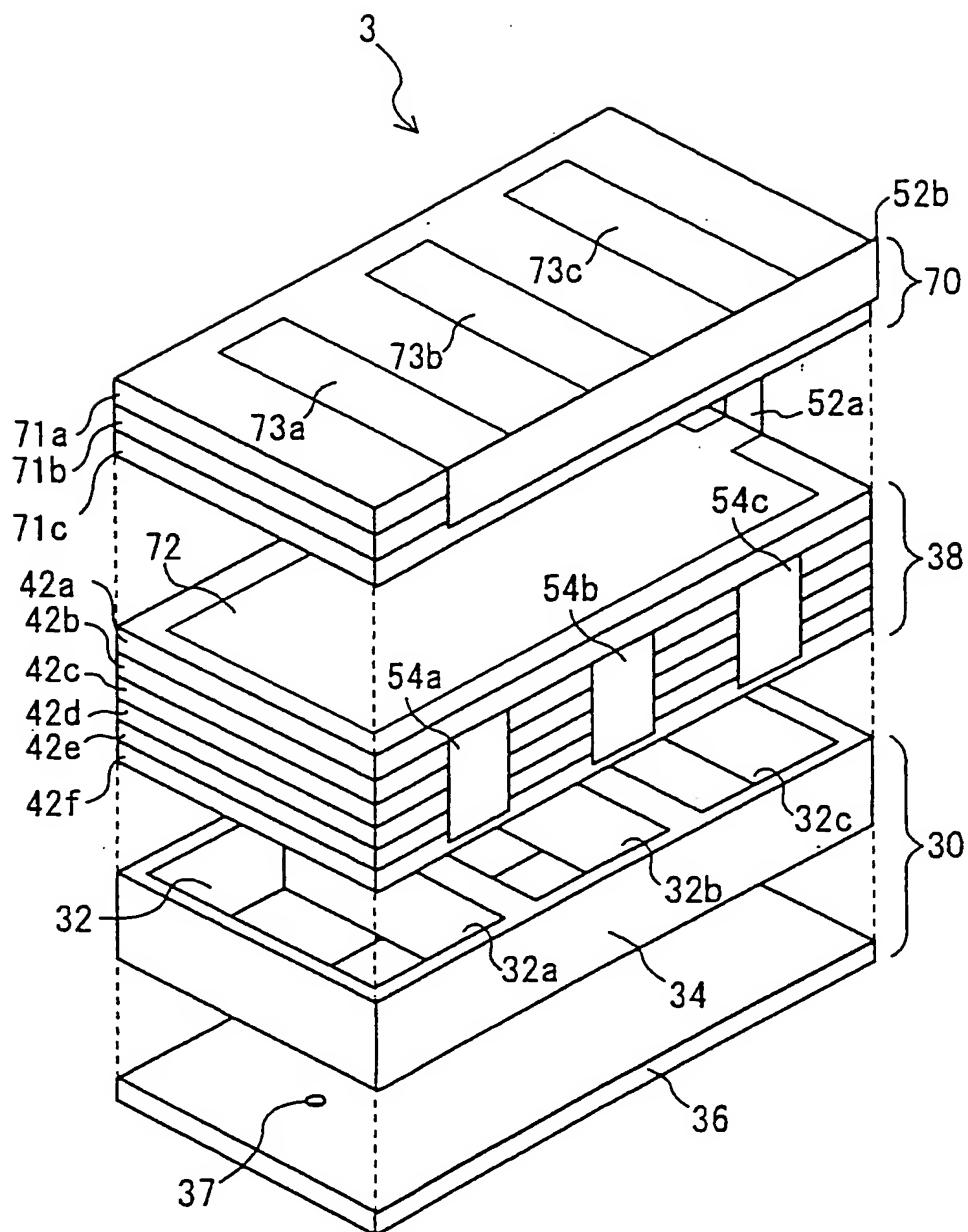


FIG.8

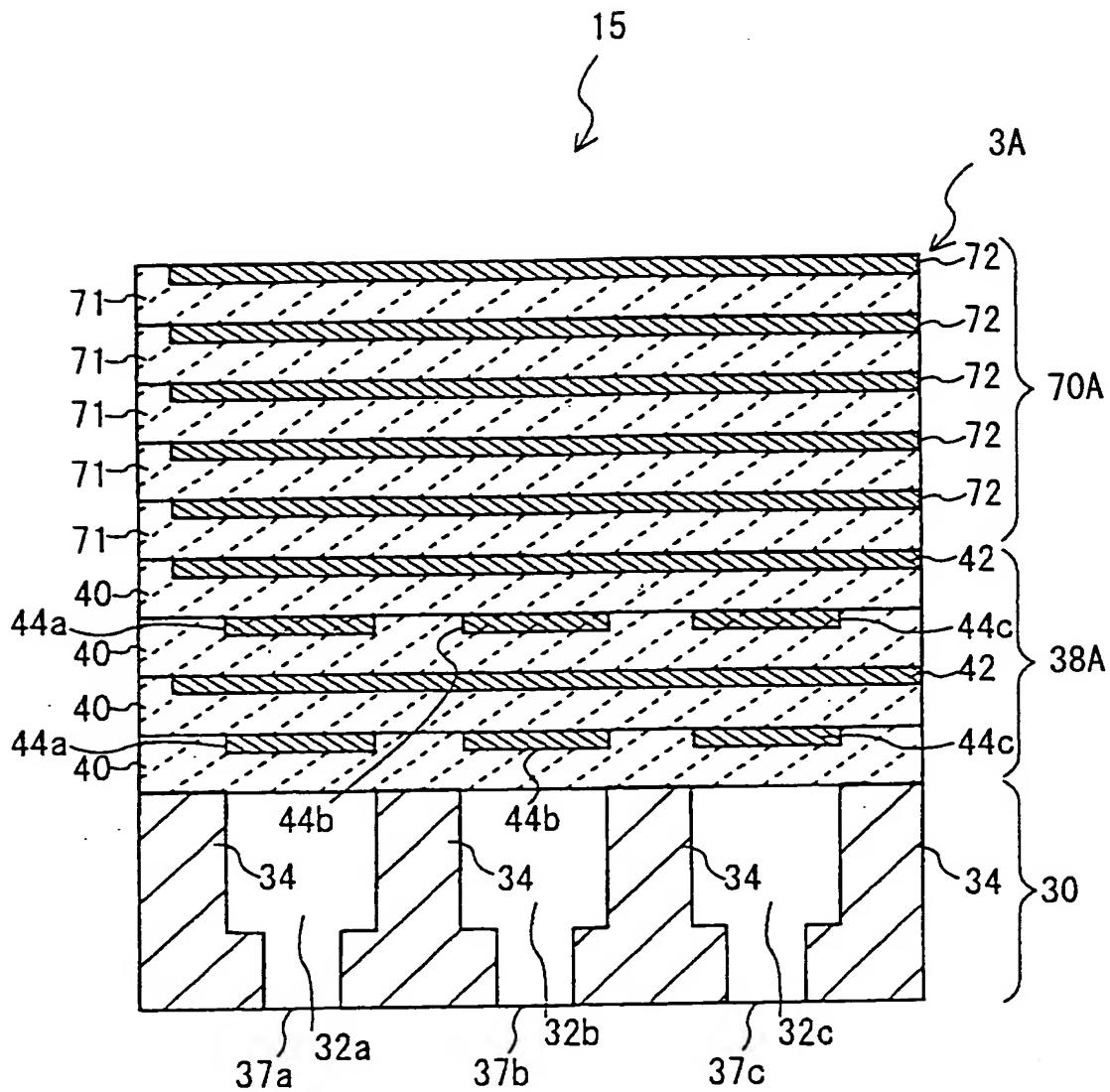


FIG.9

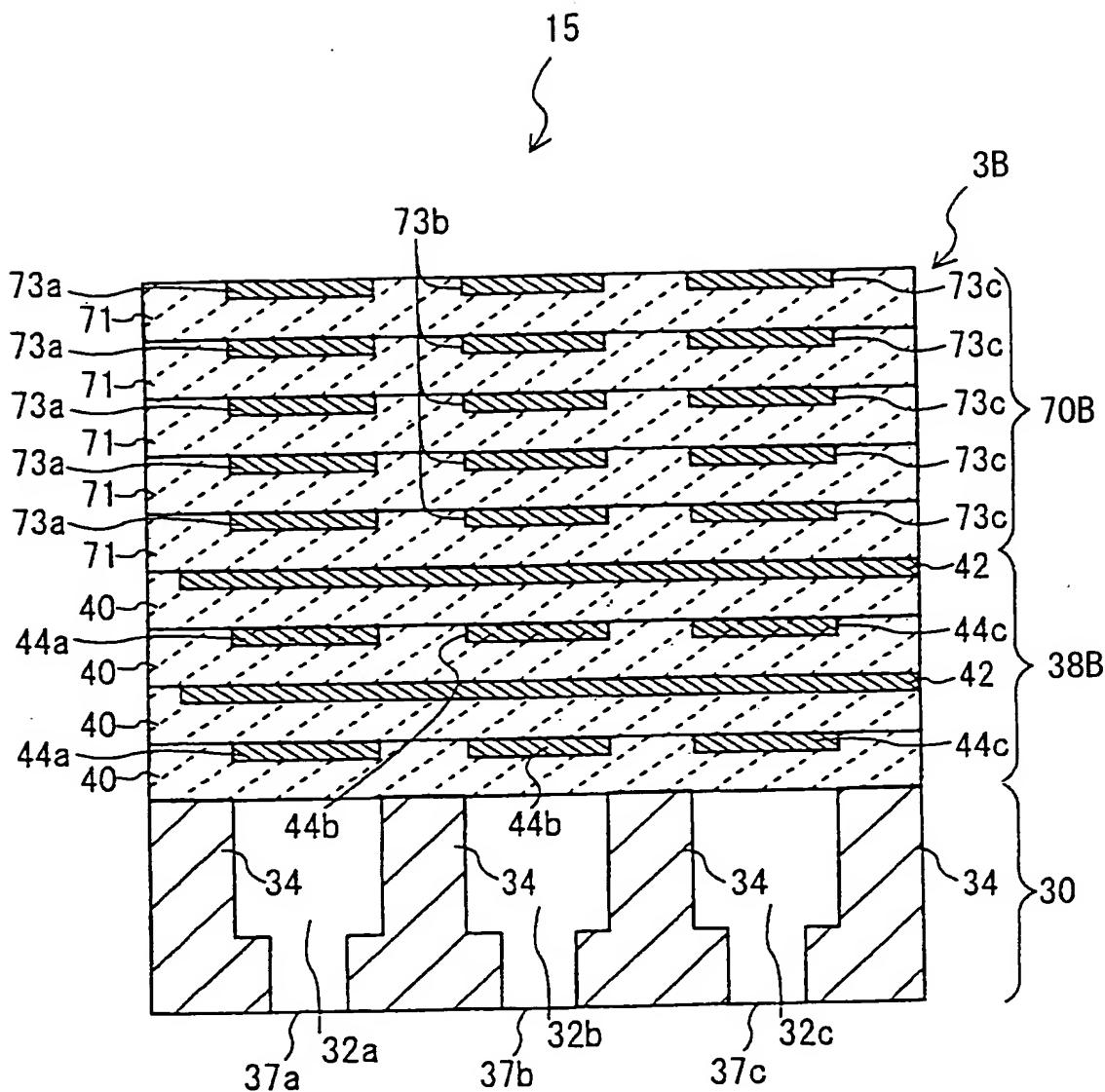


FIG.10

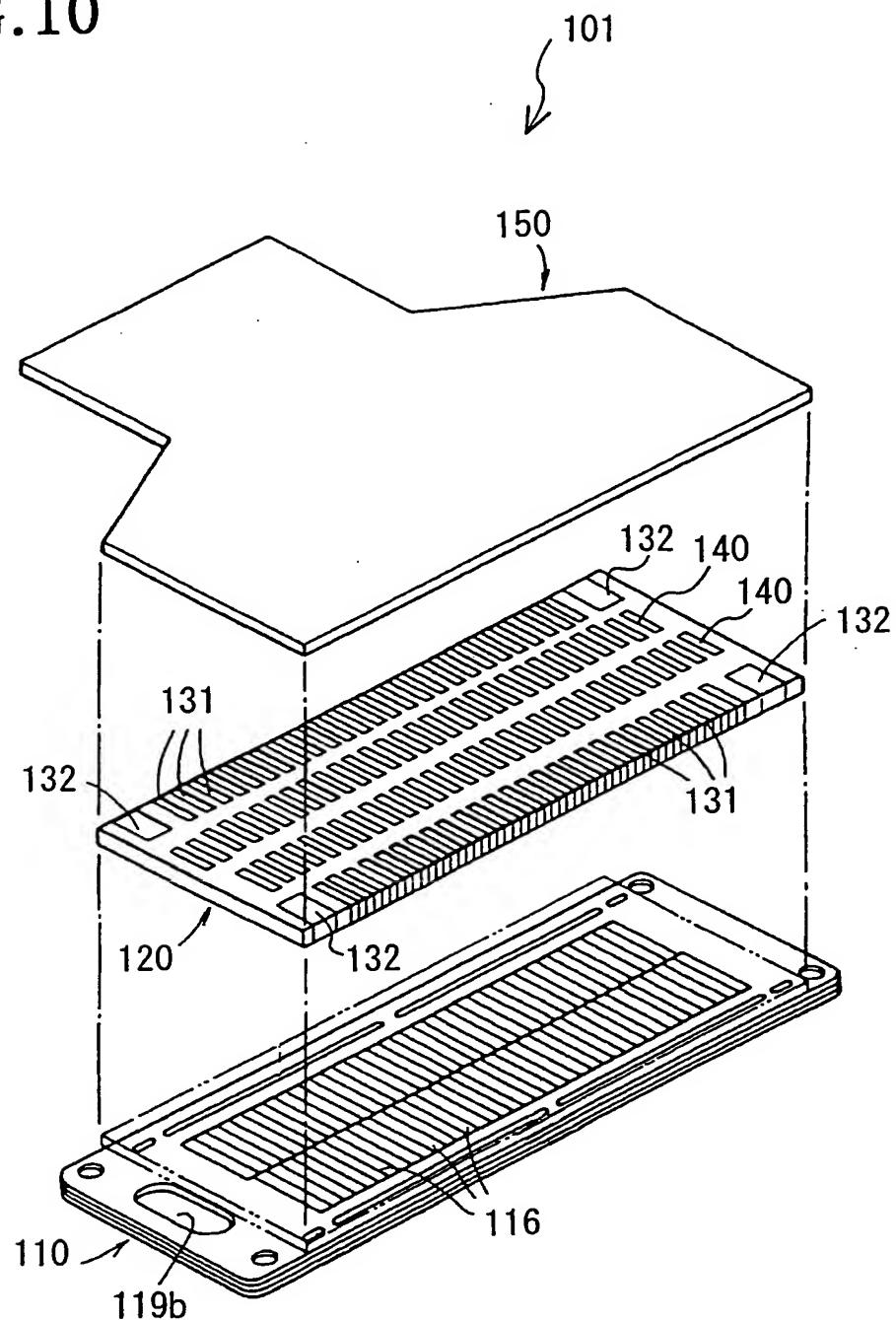


FIG.11

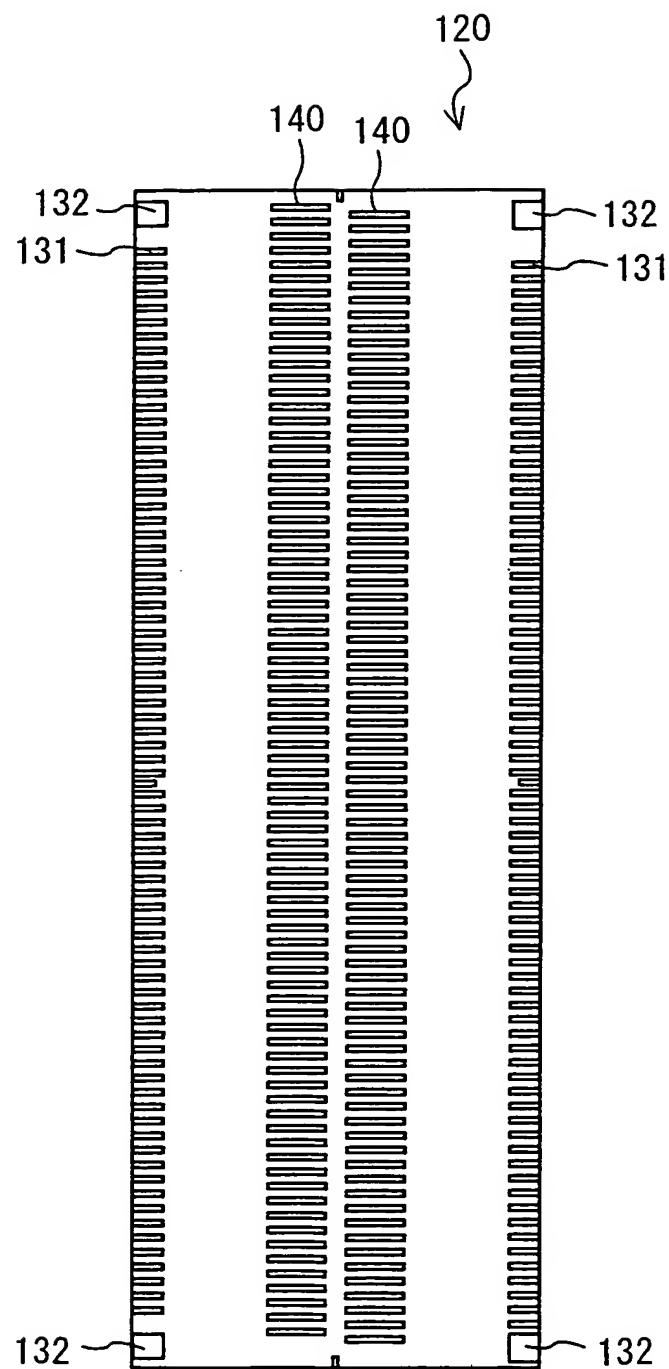


FIG.12

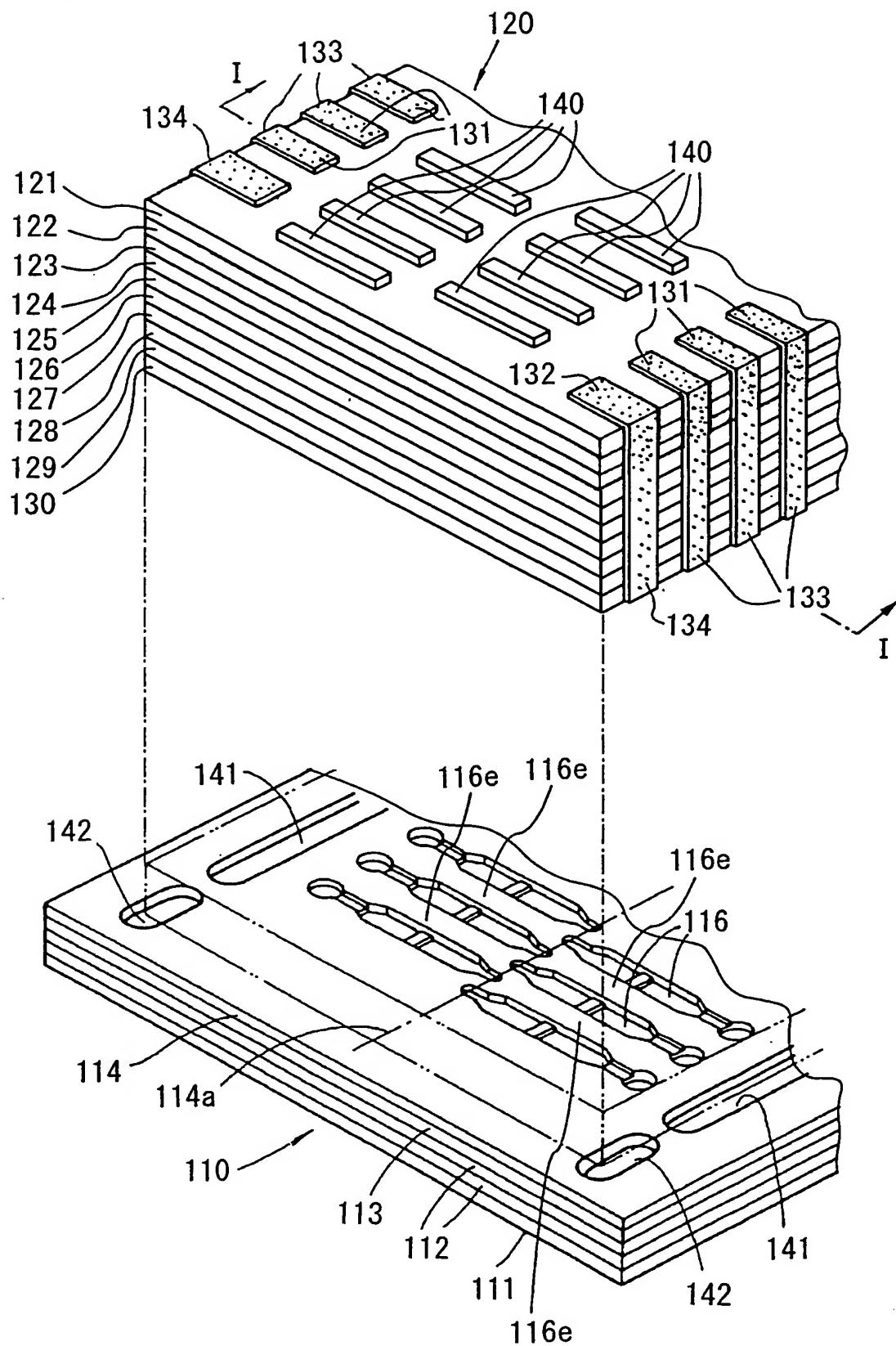


FIG.13

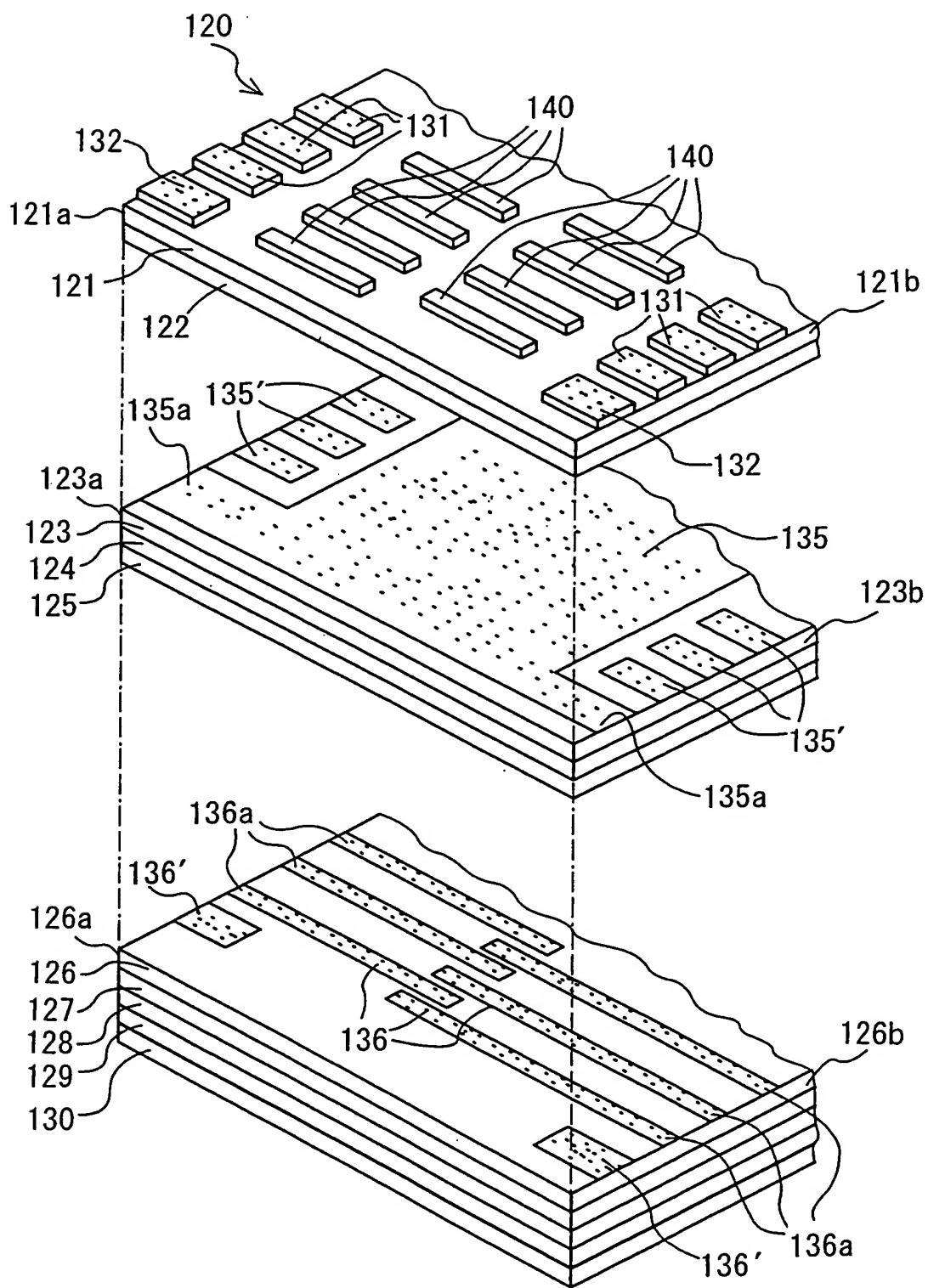


FIG.14

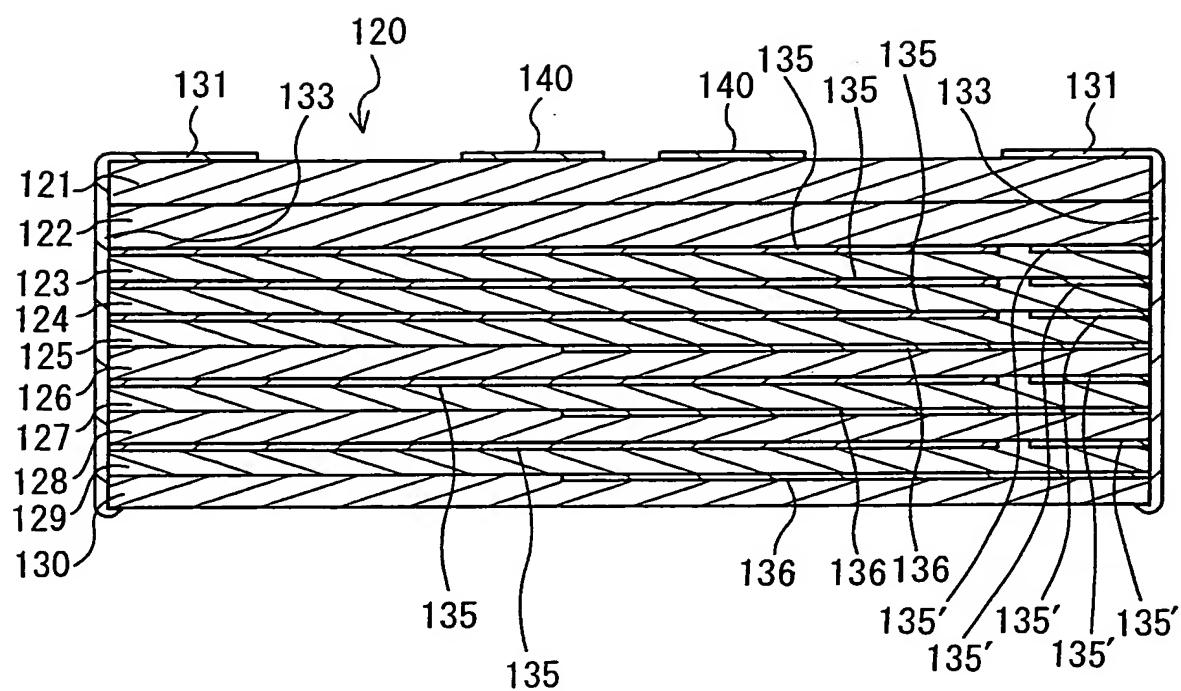


FIG. 15

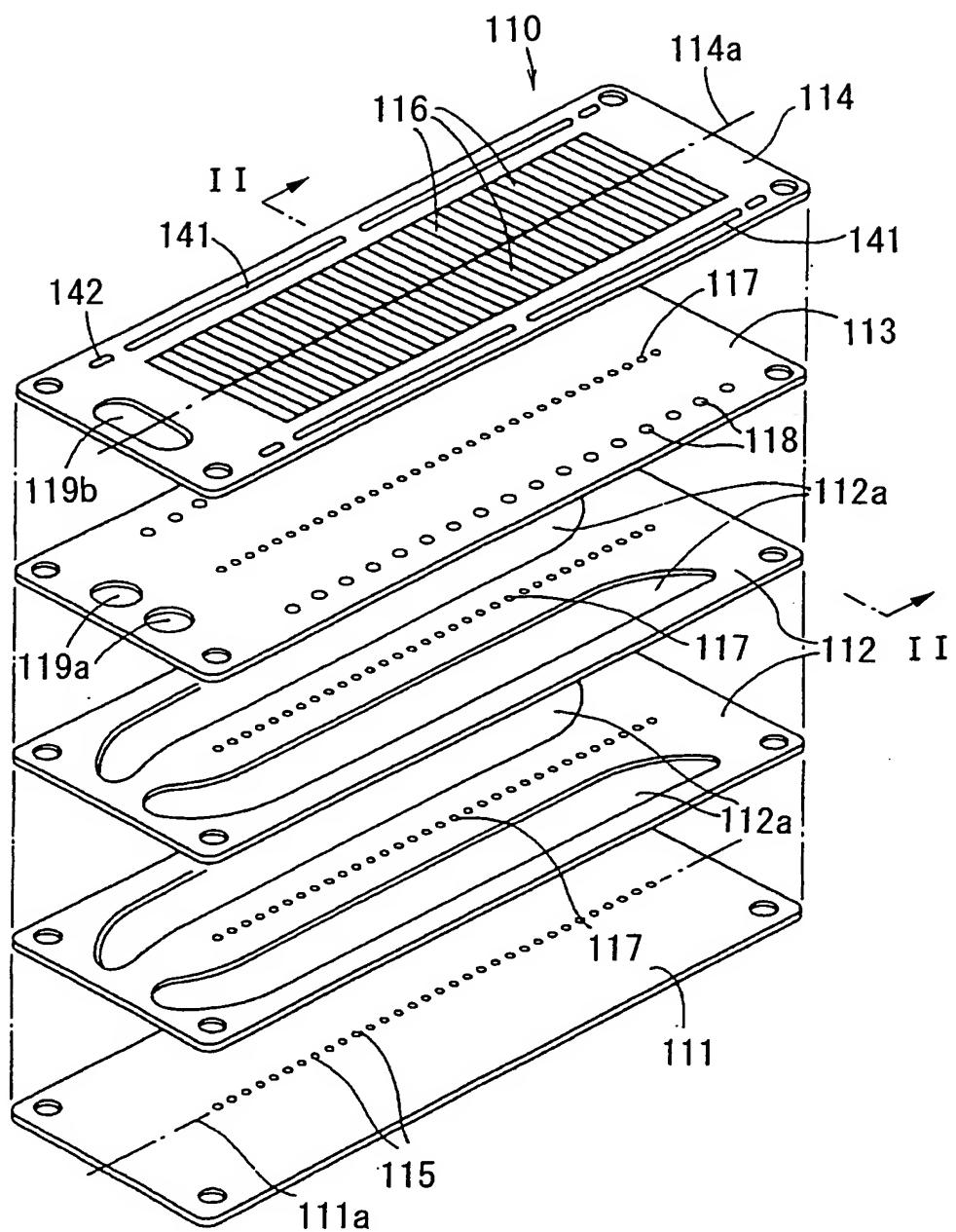


FIG. 16

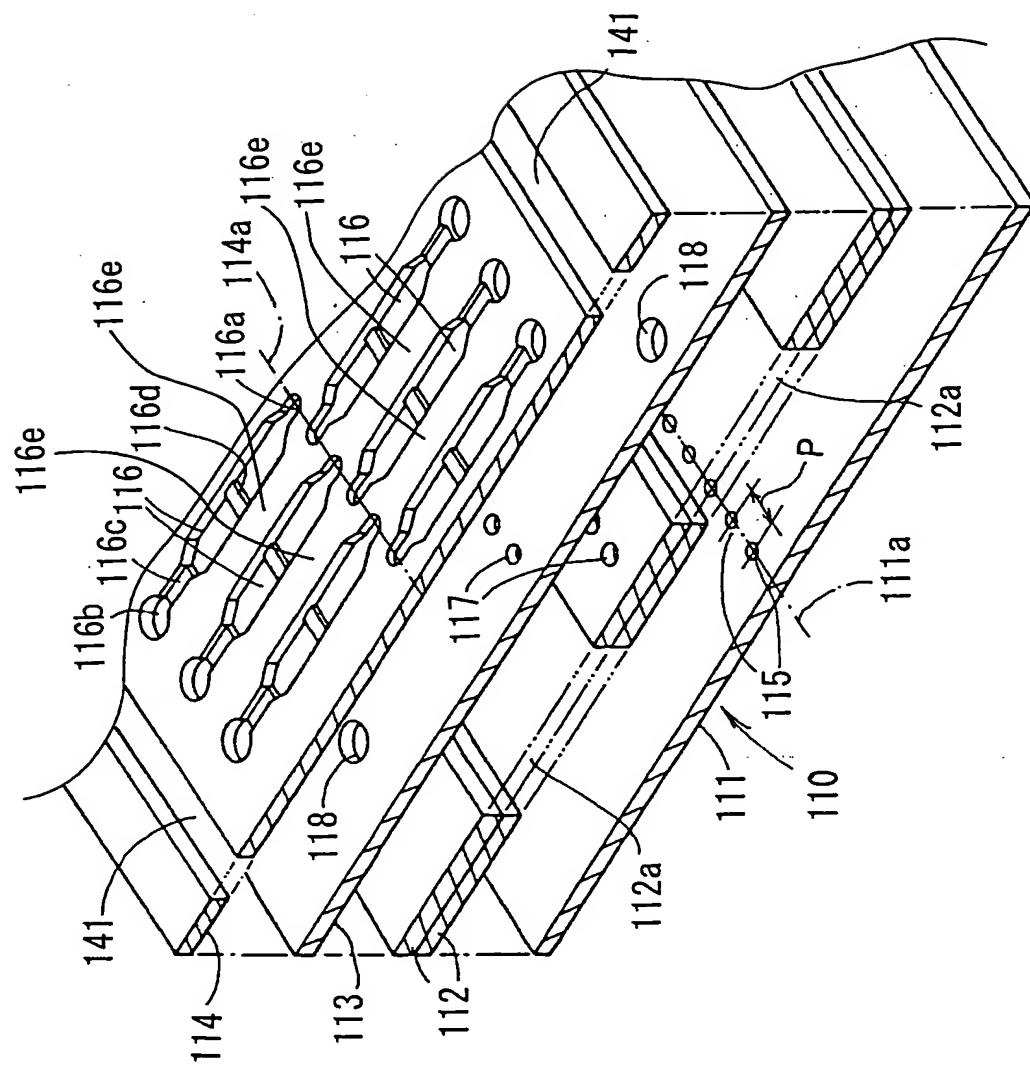


FIG.17

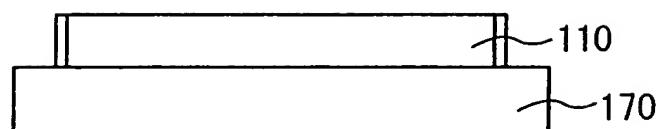


FIG.18

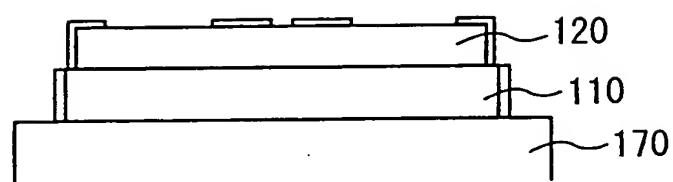


FIG.19

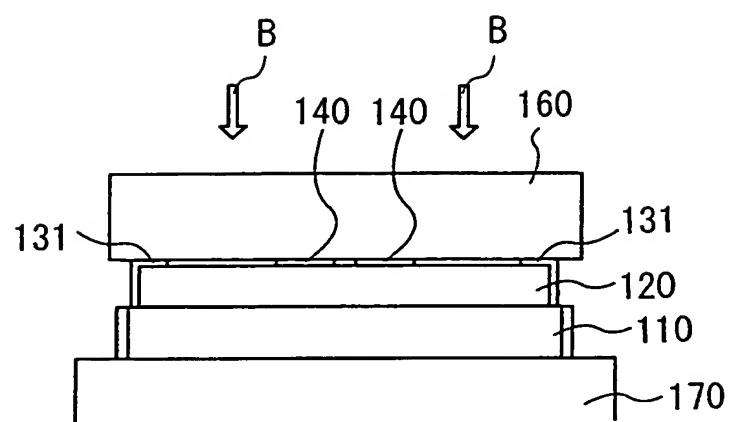


FIG. 20

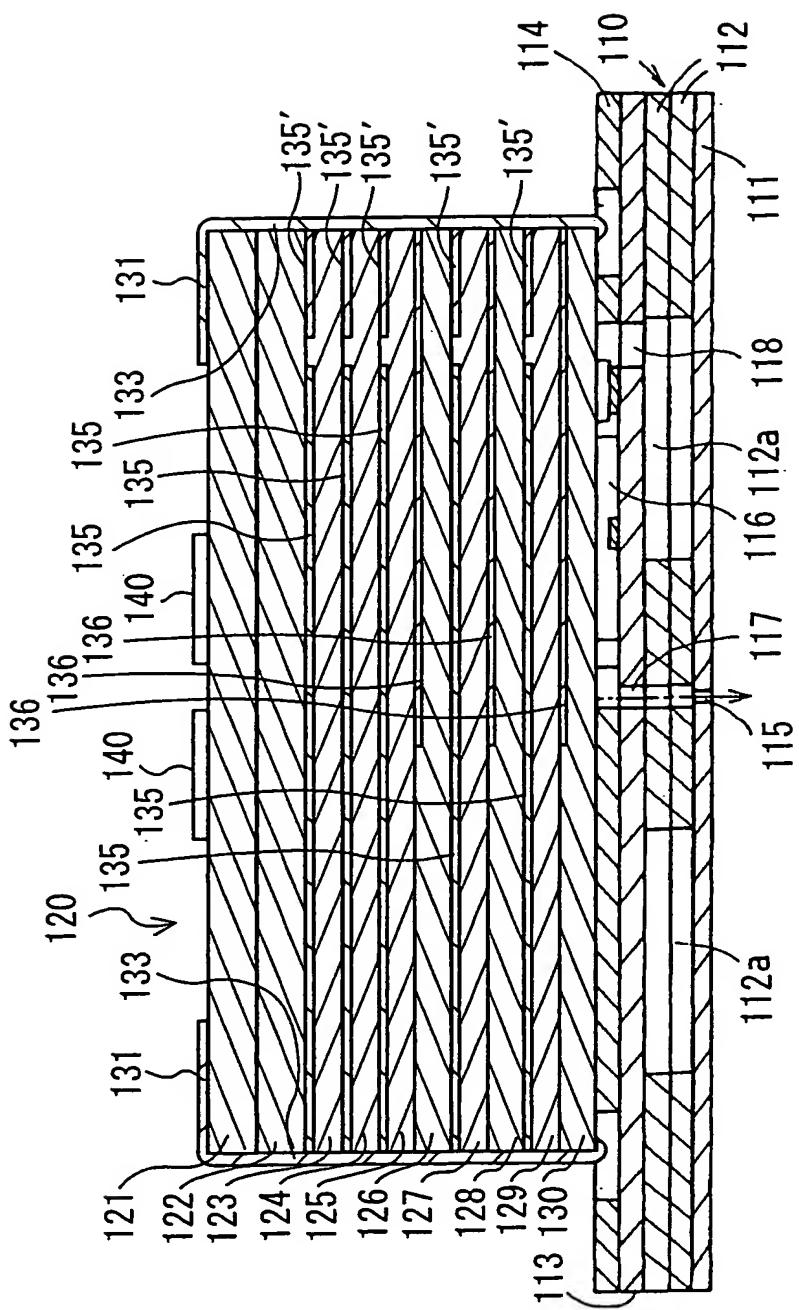


FIG.21

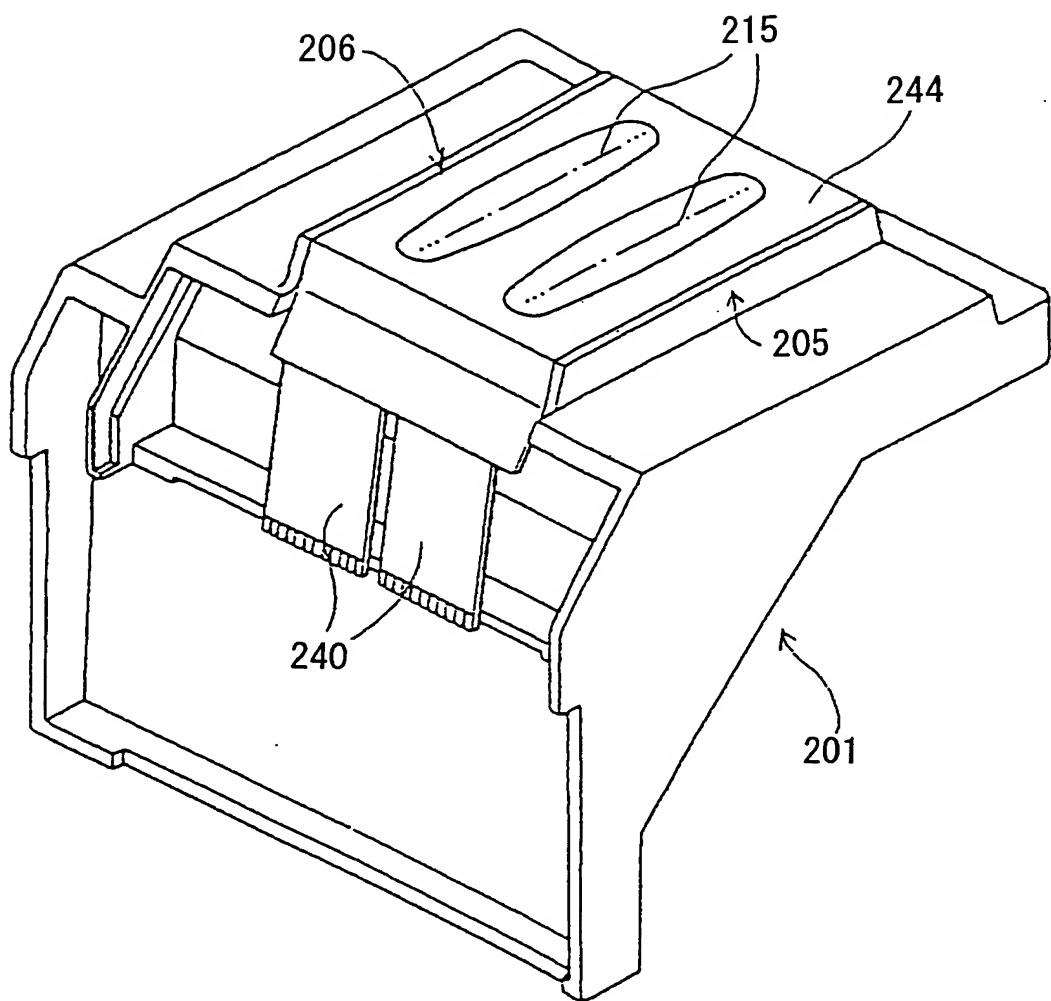


FIG.22

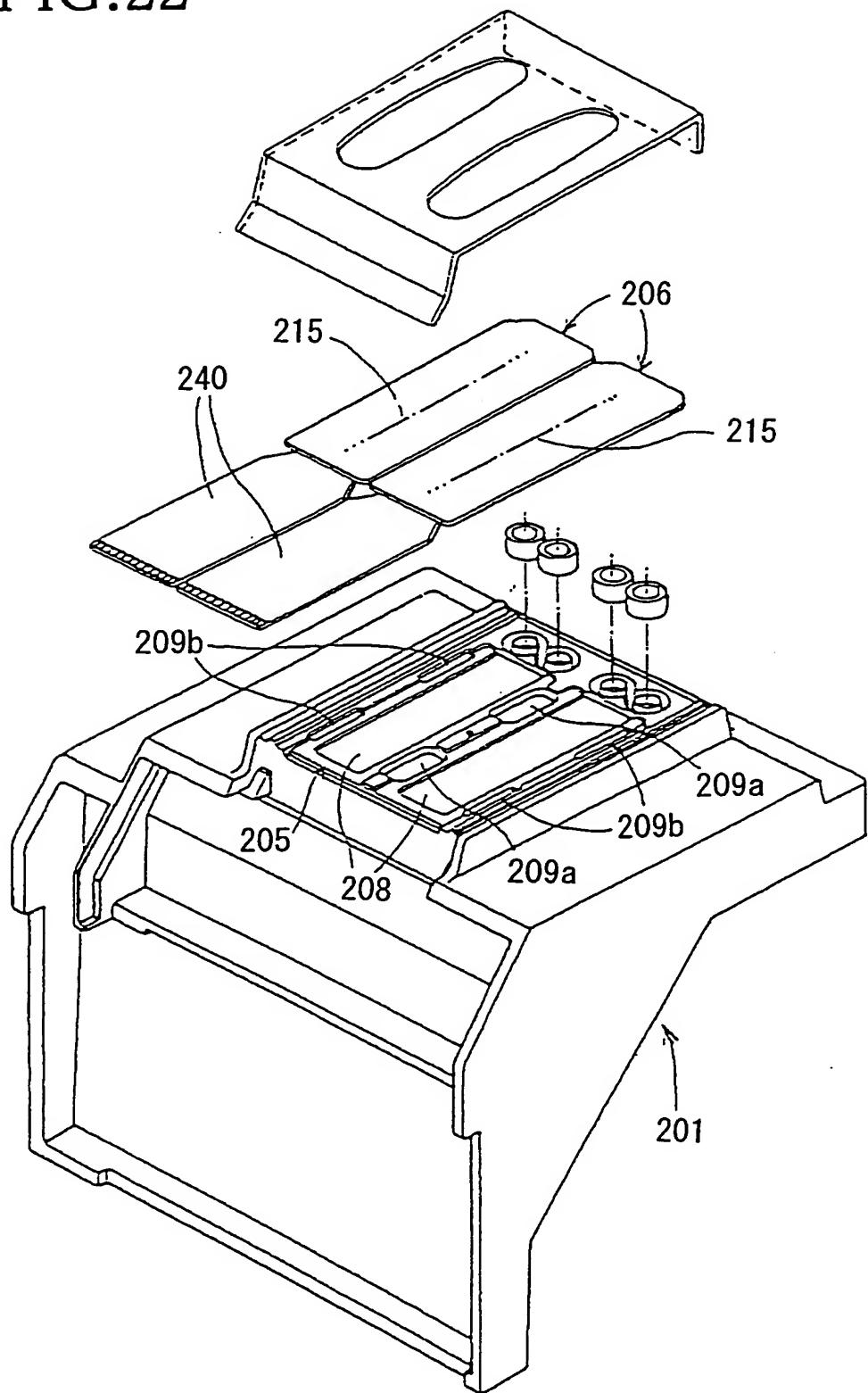


FIG.23

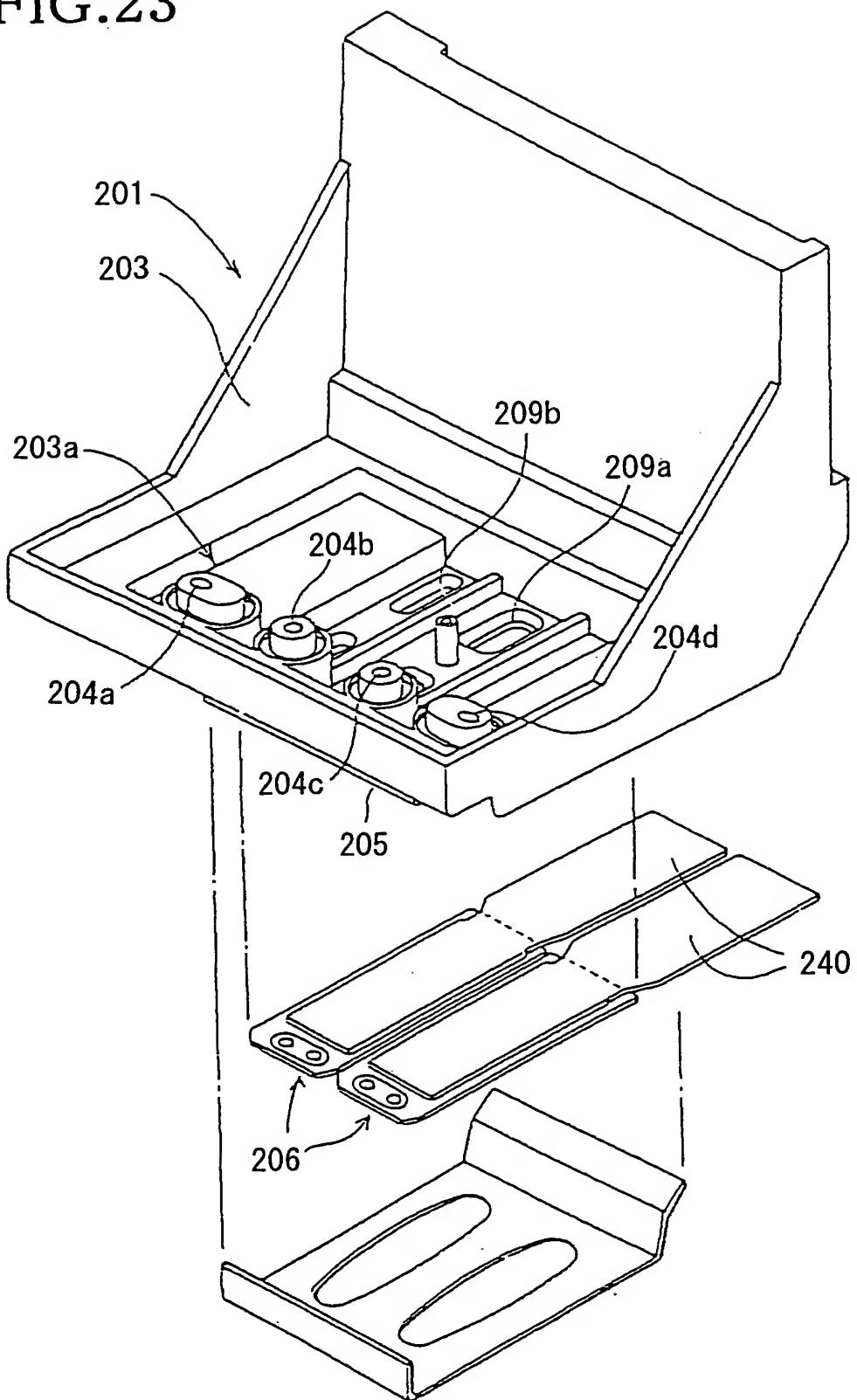


FIG.24

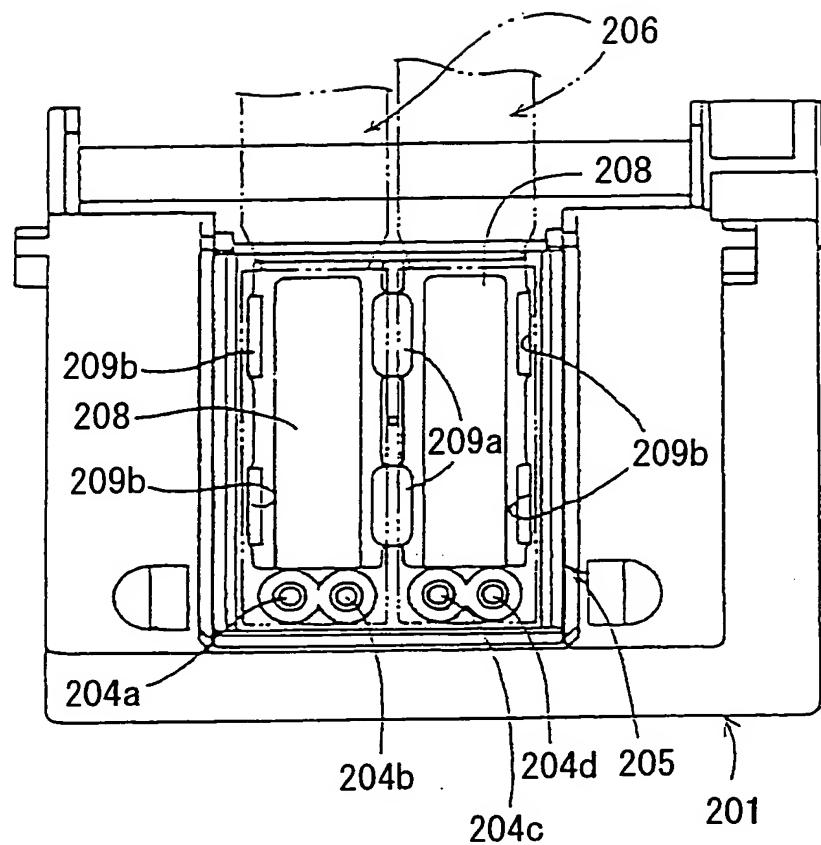


FIG.25

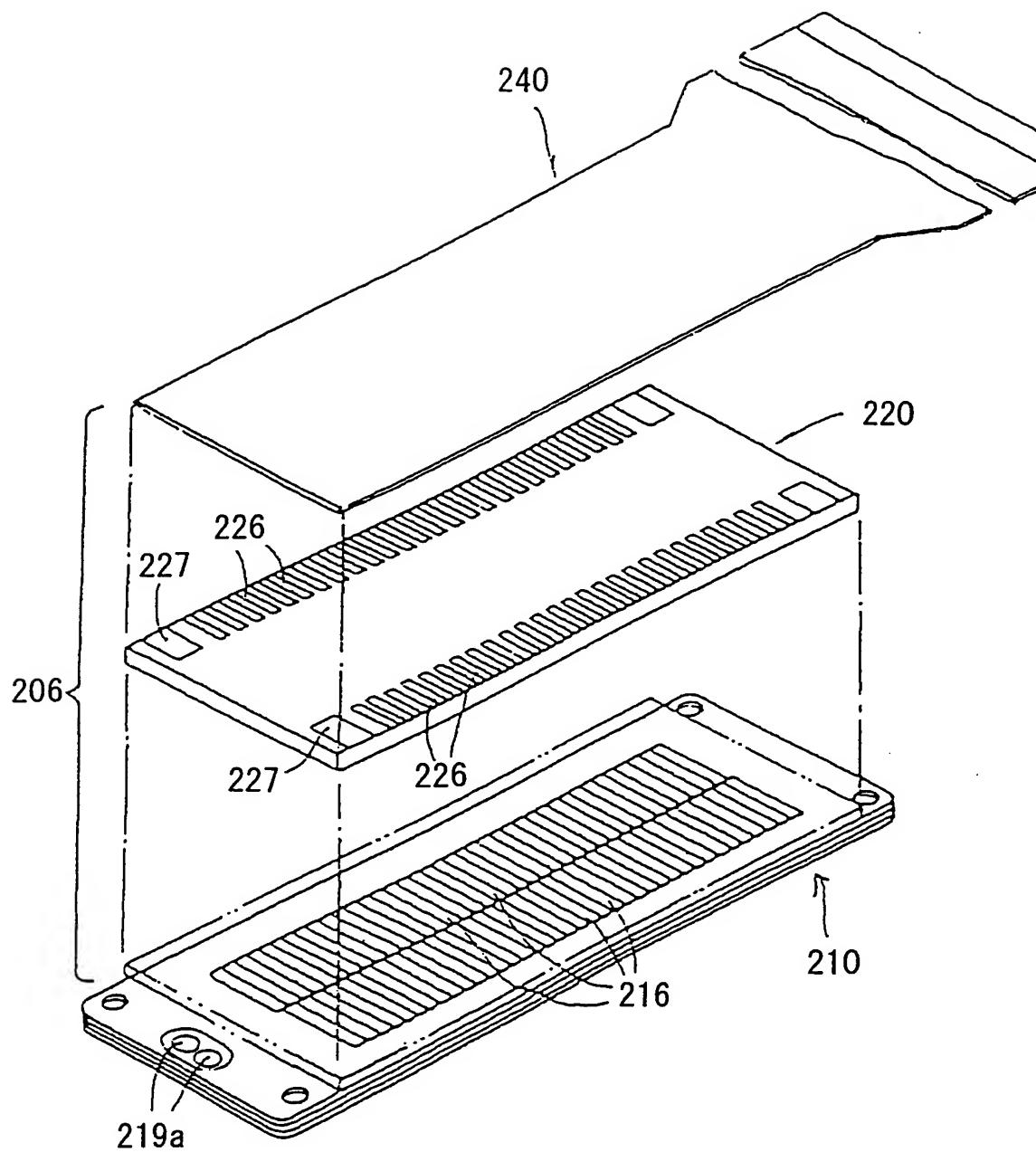


FIG. 26

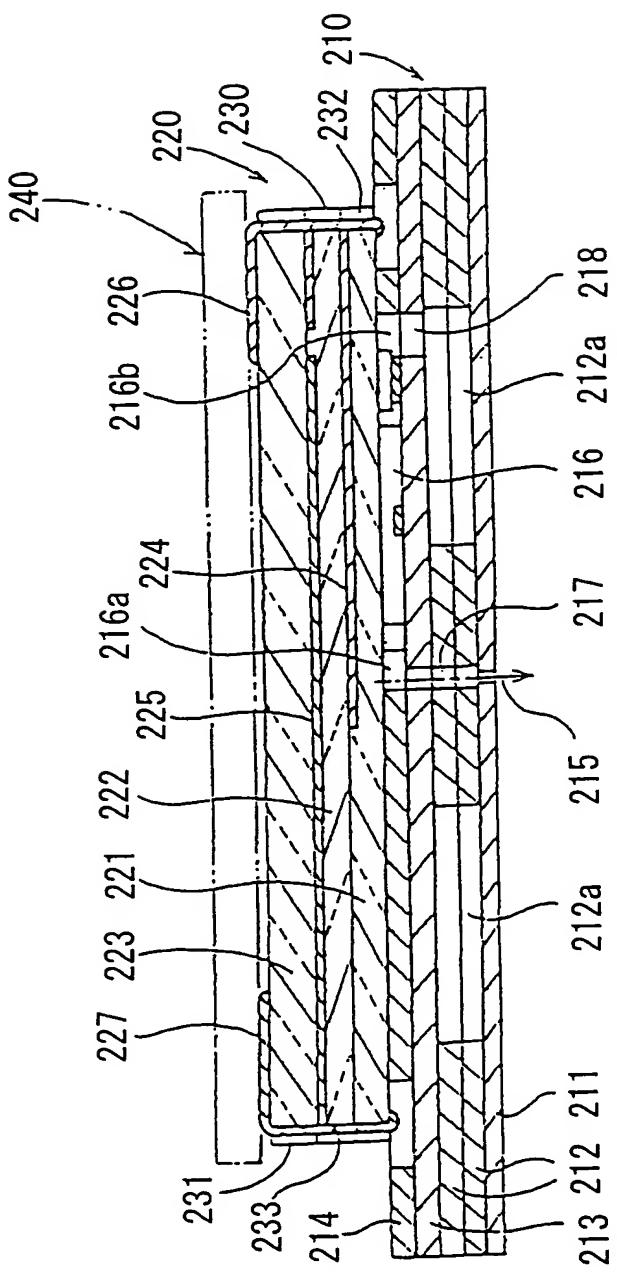


FIG.27

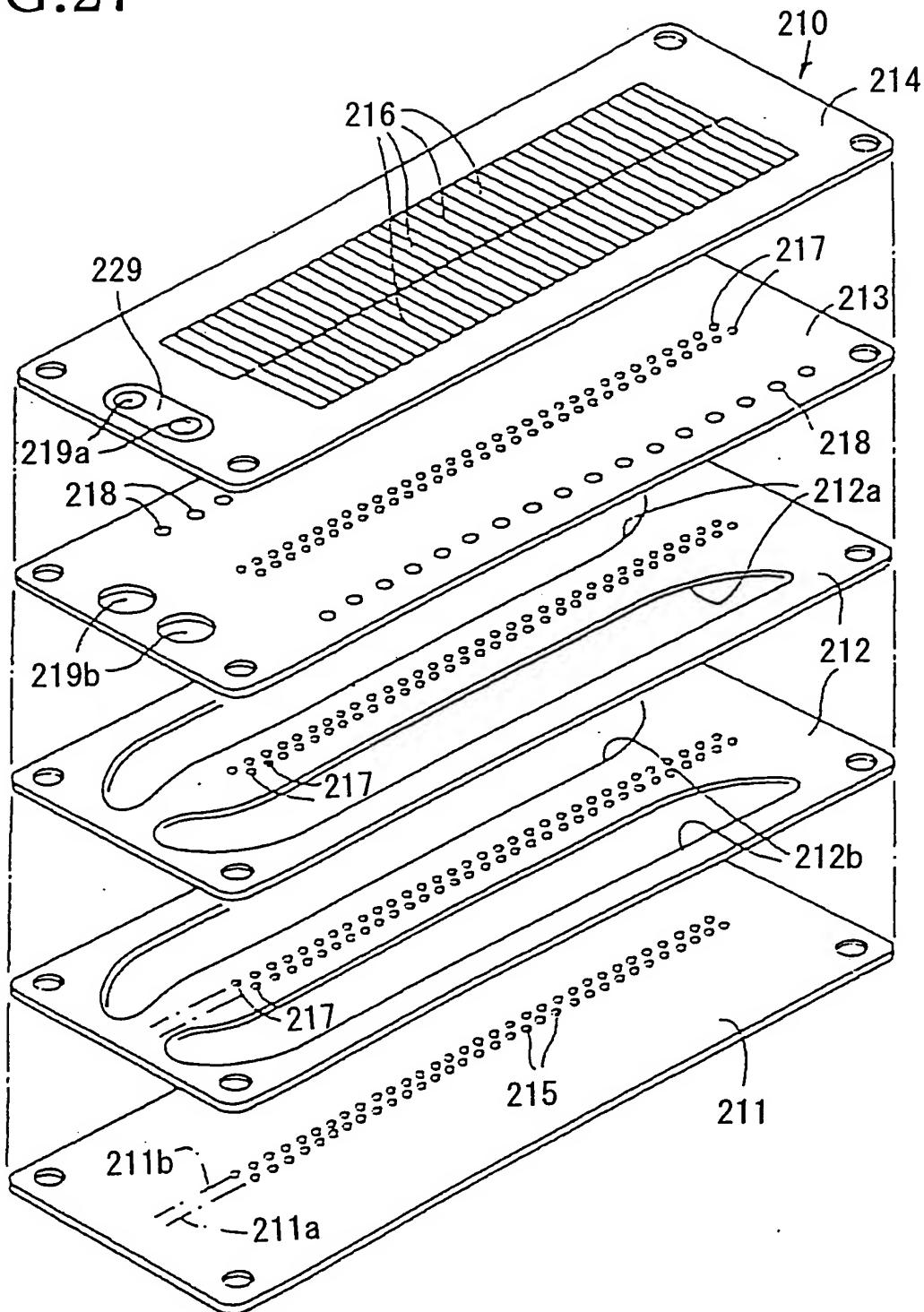


FIG.28

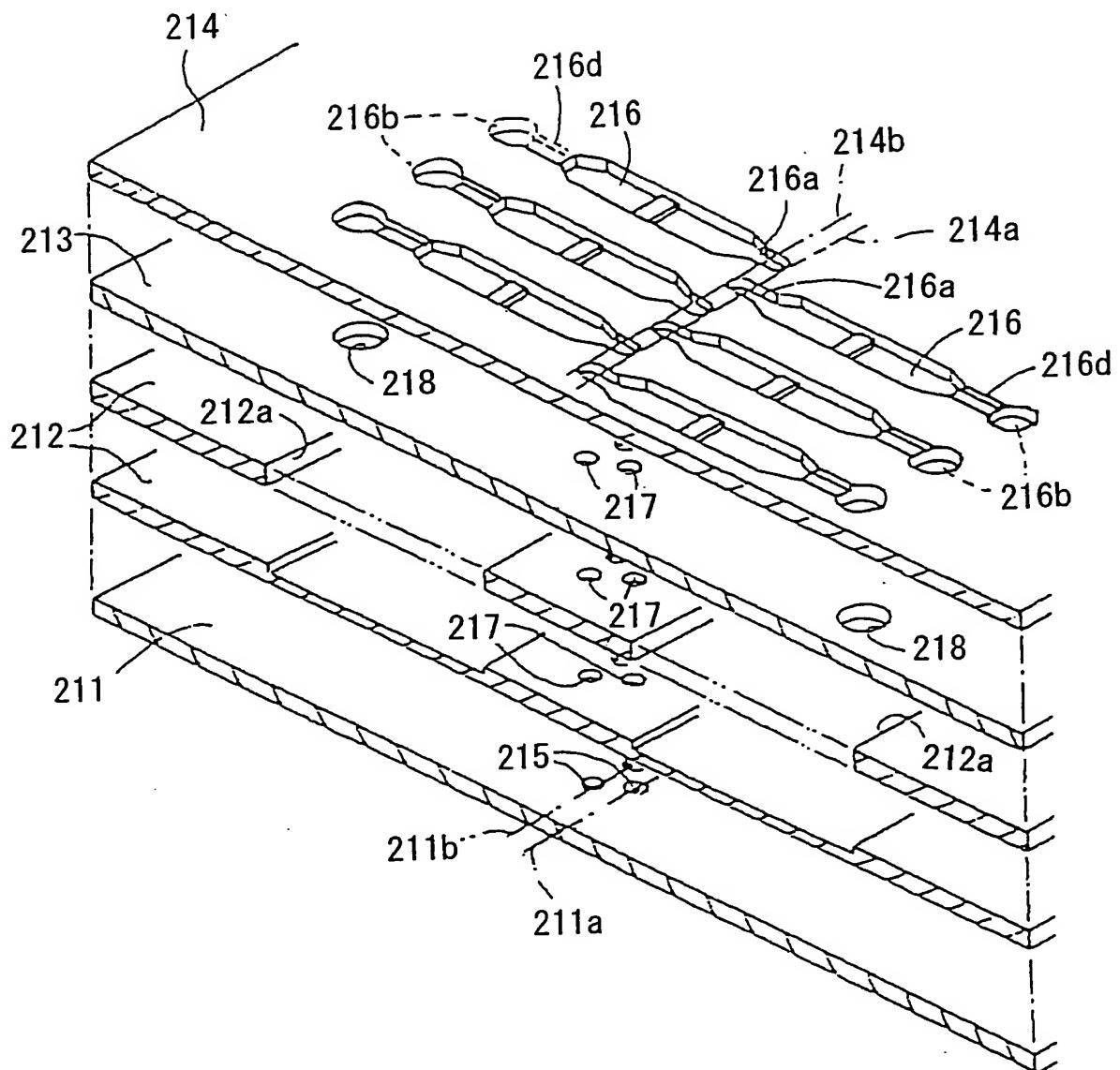
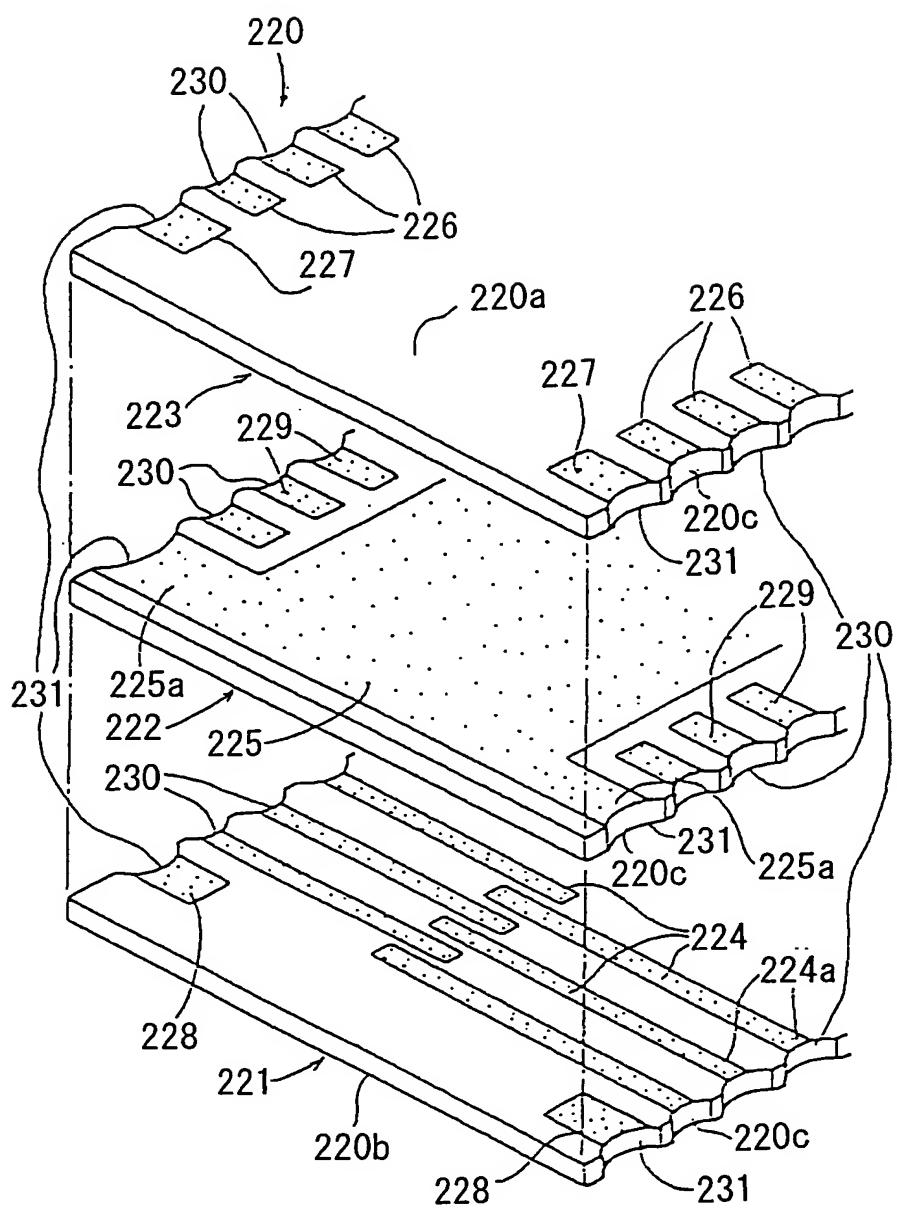


FIG. 29



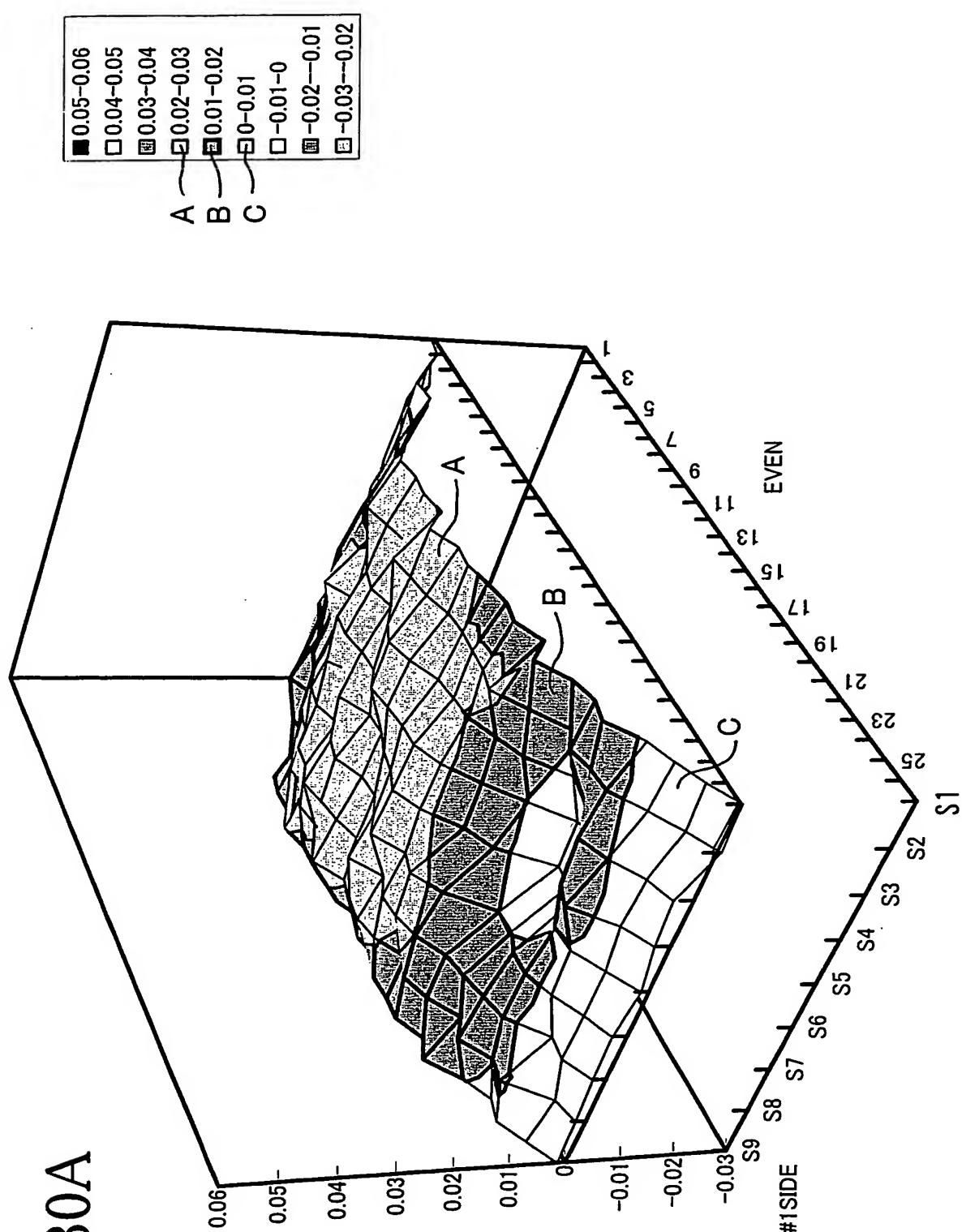
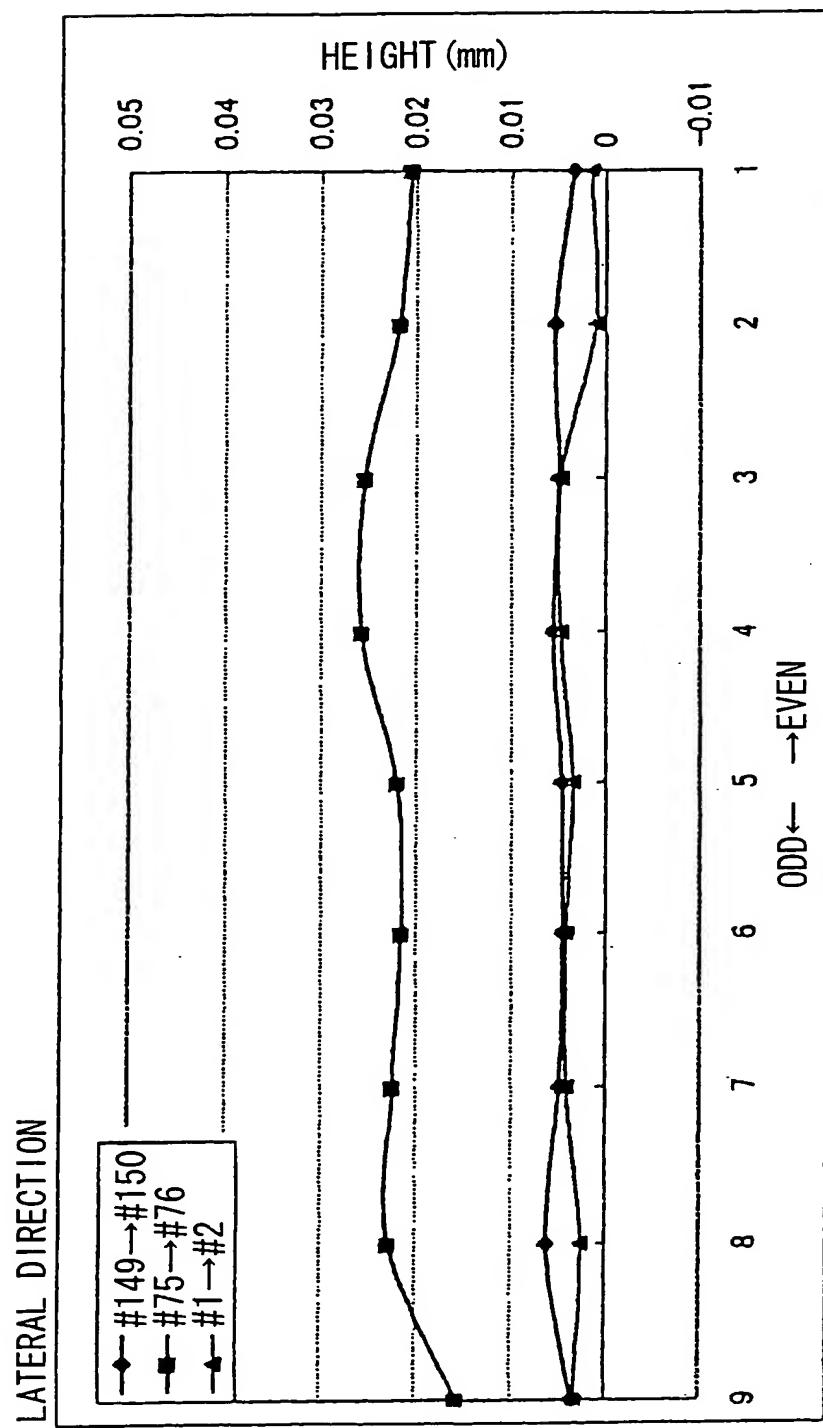


FIG. 31A



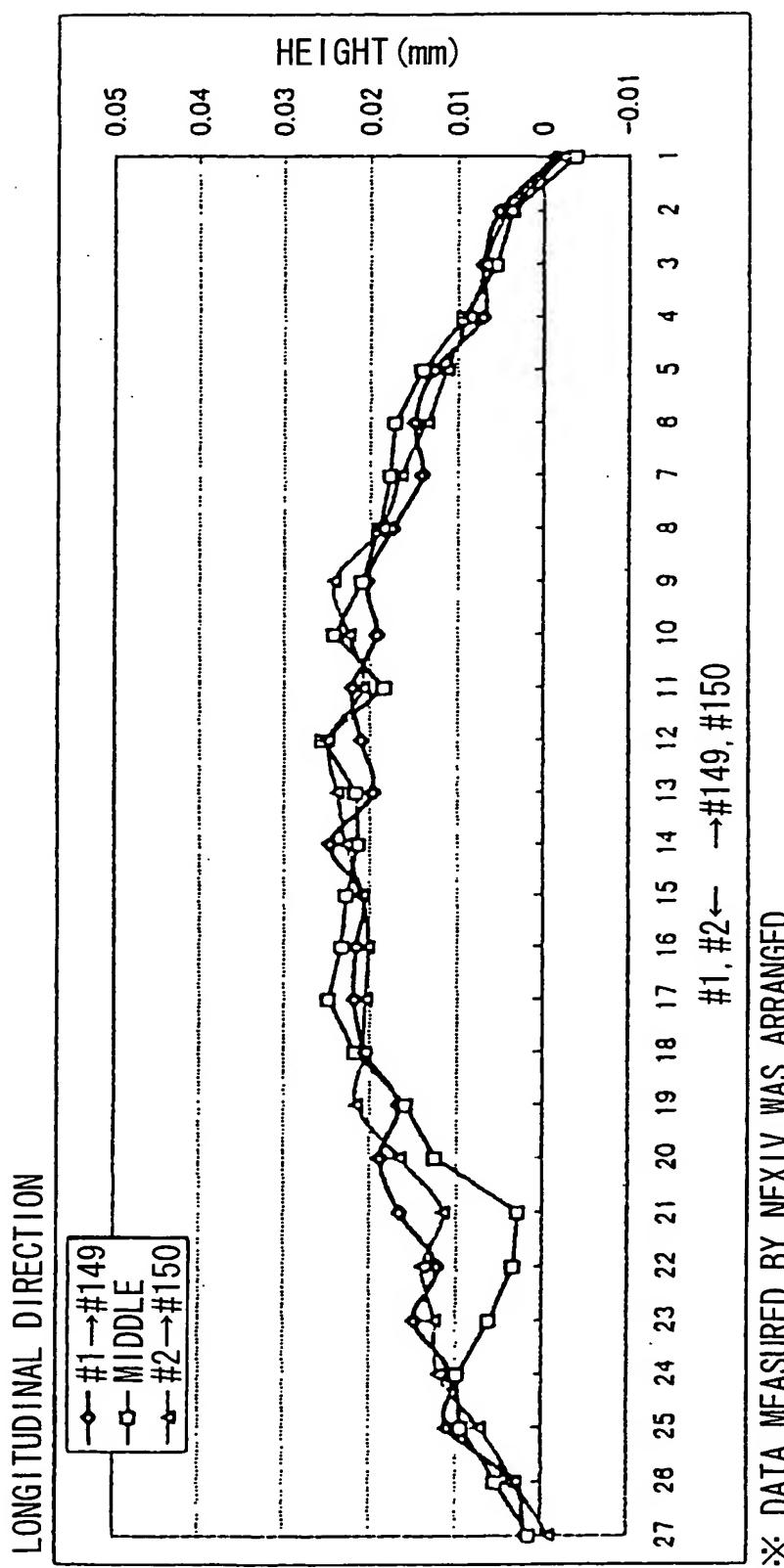
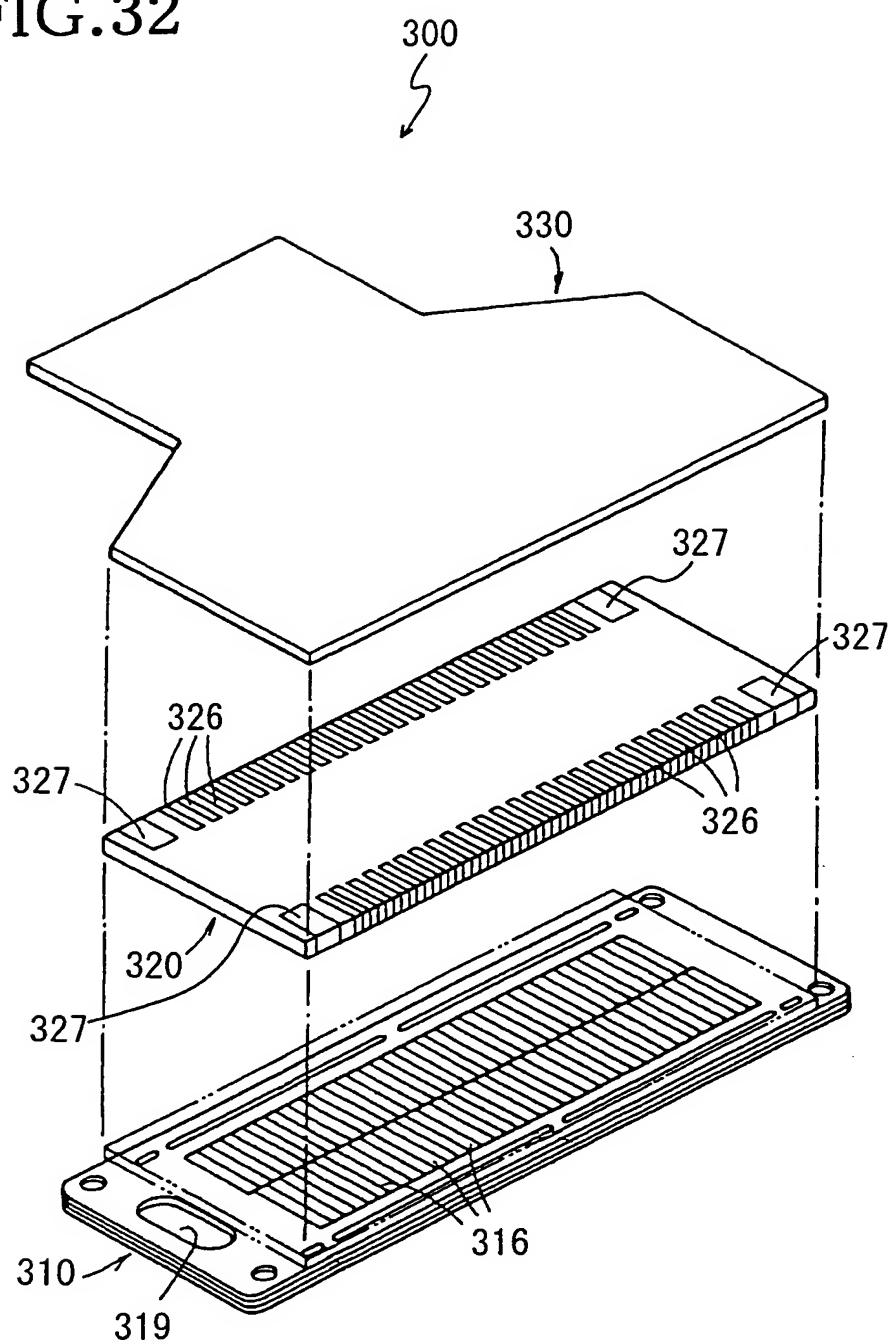


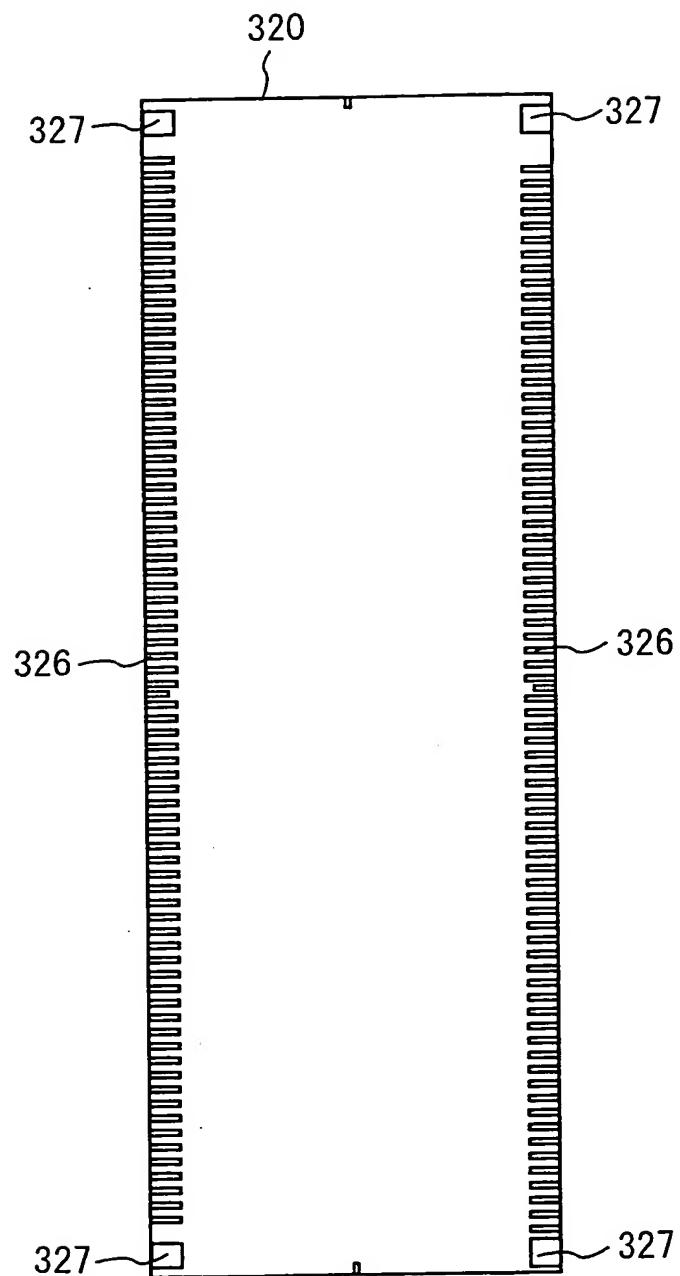
FIG.31B

FIG.32



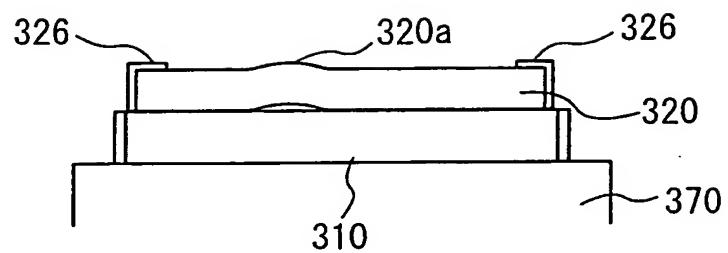
RELATED ART

FIG.33



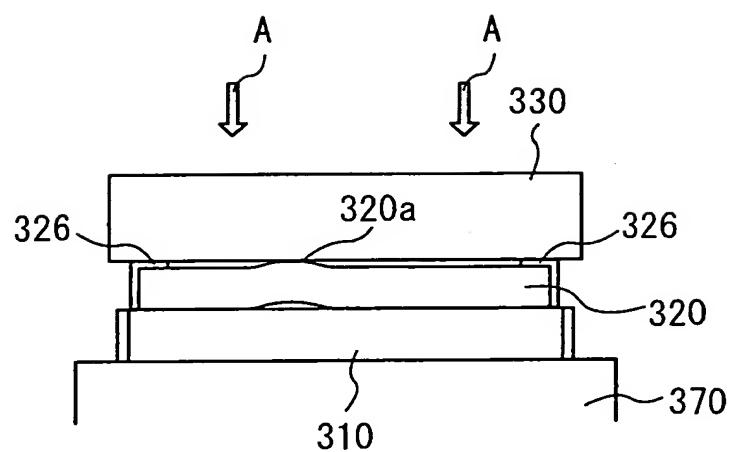
RELATED ART

FIG.34



RELATED ART

FIG.35



RELATED ART